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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,939	10/16/2003	Kevin P. McGrath	KCX-666 (19290)	4578
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DORITY & MANNING, P.A. POST OFFICE BOX 1449 GREENVILLE, SC 29602-1449			EXAMINER GEORGE, KONATA M	
			ART UNIT	PAPER NUMBER
			1616	
			MAIL DATE	DELIVERY MODE
			09/12/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/686,939	Applicant(s) MCGRATH ET AL.	
	Examiner Konata M. George	Art Unit 1616	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 June 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-74 is/are pending in the application.
- 4a) Of the above claim(s) 25-51 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12, 22-24, 52-59 and 68-74 is/are rejected.
- 7) ☒ Claim(s) 13-21 and 60-67 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/1/07</u> | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Claims 1-74 are pending in this application.

#### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on June 1, 2007 was noted and the submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner has considered the information disclosure statement.

#### ***Action Summary***

2. The provisional rejection of claims 1, 2, 5-9, 23, 24, 52-54, 56, 68-70 and 72-74 on the grounds of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-5, 7, 21-23, 40-42 and 47-53 of copending application 10/686,938 is hereby withdrawn as applicant has filed a terminal disclaimer.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 2 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the organic compound polystyrene, does not reasonably provide enablement for all other organic compounds. The specification does not enable any person skilled in the art to which it pertains, or with which it is most

nearly connected, to make the invention commensurate in scope with these claims. Applicant recites in claim 2 that the particle material can be an organic compound. However, organic compounds comprise a vast category of carbon containing compounds. Applicant in the specification discloses only polystyrene, and does not disclose any others, or suggest that any others can be used in the composition with the same expected results. Therefore, applicant will be only limited to the organic compound polystyrene.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 5, 6, 10-12, 54 and 57-59 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants use the phrase "less than about" or "greater than about" in the claims when describing particle size and zeta potential. It is unclear to the examiner if it is "less than", "greater than" or "about" the values that are being claimed.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, 9 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Yim (US 5,486,356).

Yim discloses a deodorant composition comprising a transition metal oxide or alloy with a catalytic metal on carrier (col. 1, lines 65-67). Column 2, lines 16-20 disclose the carrier comprising silica and magnesium oxide. Column 2, lines 21-23 teach the transition metals selected from the group consisting of chromium, manganese, titanium, vanadium, zinc, etc. Column 3, lines 16-18 teach that the deodorant composition easily absorbs offensive-smelling materials such as ammonia, amine, methyl-mercaptan, carbon disulfides and the like.

6. Claims 1-12, 22-24, 52-59 and 68-74 are rejected under 35 U.S.C. 102(b) as being anticipated by Harada et al. (US 6,410,616).

Harada et al. disclose absorbent articles comprising woven and non-woven fabrics (col. 9, lines 25-64), which can include deodorants (col. 10, lines 19) comprising inorganic particles having an affinity for water different from the high molecular compound. The inorganic particles are described in column 5, lines 13-22, and can be, hydrophobic alumina or hydrophilic particles, such as, alumina oxide. It is also taught in column 5, lines 29-31 that a particle size of less than 100 nm is preferable. Although Harada et al. is silent respect to the zeta potential of the particles, it is the position of the examiner that the limitation is inherent, since Harada et al. teach the same particles as claimed.

***Claim Objections***

7. Claim 19 objected to because of the following informalities: claim 19 depends from itself. Appropriate correction is required.

***Allowable Subject Matter***

8. Claims 13-18, 20, 21 and 60-67 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not teach the composition comprising a bifunctional chelating agent that complexes the transition metal to the particles.

***Conclusion***

9. Claims 1-12, 22-24, 52-59 and 68-74 are rejected.
10. Claims 25-51 remain withdrawn.

***Telephone Inquiries***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Konata M. George, whose telephone number is 571-272-0613. The examiner can normally be reached from 8AM to 6:30PM Monday to Thursday.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter, can be reached at 571-272-0646. The fax phone numbers for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have question on access to the Private Pair system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Konata M. George  
Patent Examiner  
Technology Center 1600

Johann R. Richter  
Supervisory Patent Examiner  
Technology Center 1600

  
SHELLEY A. DODSON  
PRIMARY EXAMINER

  
For  
Johann R.  
Richter